

REMARKS

In the Office Action mailed July 25, 2006, the Examiner noted that claims 1-27 were pending, and rejected claims 1-27. No claims have been amended, and, thus, in view of the forgoing claims 1-27 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejections are traversed below.

OBJECTIONS

The examiner objects to the amendment filed March 22, 2006 under 35 U.S.C. § 132(a) as adding new matter to the specification. In particular the Examiner objects to "a display unit displaying the simplified model so that when an angle of normals of adjacent planes generated by the generating unit is smaller than a predetermined value a line between the adjacent planes is maintained in the model and not displayed," as in claim 1. The application discloses:

The triangle planes in the case shown in FIG. 3) forming the surfaces of the simplified model, is smaller than a predetermined value, the adjacent polygons are recognized to represent a smooth plane, and the side shared by the polygons is not displayed. In this way, 2 polygons are viewed as one polygon, a smooth change in the plane can be represented better, and the number of lines is reduced. (See page 11 lines 7-14 of the application)

The application clearly discloses the model maintaining two polygons, but not displaying the line of the adjacent sides.

Further, as described with respect to Figures 4-6 it is clear that the model retains the data for a line. For example, Figure 4 has a display area 12 where the detailed data of the model is displayed in a tree and display area 13 where the simplified data used for the simplified display 11 is kept. Figure 5, shows the simplified drawing with the detailed drawing shown translucently, another example of maintaining a line in a model. Figure 6 shows the opposite, the simplified display drawn translucently with the detailed display fully drawn.

Withdrawal of the objection is respectfully requested.

REJECTIONS under 35 U.S.C § 112

Claims 1, 9, and 17 stand rejected under 35 U.S.C § 112, first paragraph as failing to comply with the written description requirement. For the reasons argued above, the claims comply with the written description requirement as "a predetermined value a line between the adjacent planes is maintained in the model and not displayed," as in claim 1, is supported in the application.

Withdrawal of the rejection is respectfully requested.

REJECTIONS under 35 U.S.C § 102

Claims 1-5, 9-13, 17-21 and 25-27 stand rejected under 35 U.S.C § 102(b) as anticipated by Isaacs. In the Action the Examiner, when addressing the display feature added to the claims pointed to Isaacs col. 11, lines 8-47 noting that when the angle between triangles is less than a user set value the points of the touching edges are removed. The removal of points deletes them from the model so that the edge no longer exists, which results in model resolution and complexity being reduced. This also results in a change in shape of the model producing what could be a large difference from the detailed shape of the original model.

In contrast, the present invention does not remove points from the model but rather suppresses the display of the edge line when the angle between plane normals is less than a predetermined value. That is, the points representing the edge line are not deleted but remain in the model. See "displaying the simplified model so ... a line between the adjacent planes is maintained in the model and not displayed," as in claim 1.

By not removing the points/line but just suppressing their display, the present invention maintains the complexity and resolution of the model but displays it more simply. This allows any changes in the model to take into account the complexity and at a higher resolution than is possible in Isaacs. Additionally, by retaining the edge line, the original shape of the model is retained, and by suppressing the display of certain lines, a display of the model is produced which facilitates viewing while at the same time maintains the detailed shape of the original model. This is a distinct improvement over Isaacs where points are removed.

Further, the cited references discusses a method wherein a computer automatically generates a model made of a set of triangles from geometry data of airplanes, etc... and a human manually edits the model made of triangles. Upon automatically generating the model, no matter how high the degree of subsequent freedom, the model cannot be changed from the automatically generated form. In contrast, the present claims are directed to a method where the user manually inputs the model made of triangles. A first point is designated, allowing unlimited modeling in accordance with the usage of the generated model.

For the reasons stated above, claims 1, 9 and 17 and the claims dependent therefrom are patentably distinguishable from Isaacs.

Withdrawal of the rejection is respectfully requested.

REJECTIONS under 35 U.S.C § 103

Claims 6-8, 14-16 and 22-24 stand rejected under 35 U.S.C § 103(a) as being obvious over Isaacs in view of Brittain or in further view of Schuur.

Brittain adds nothing to Isaacs with respect to the features and benefits discussed above.

Schuur also adds nothing to Isaacs or Brittain with respect to the features and benefits discussed above.

Isaacs, Brittain or Schuur taken separately or in combination fail to teach or suggest the elements of claims 6-8, 14-16 and 22-24.

Withdrawal of the rejection is respectfully requested.

SUMMARY

It is submitted that the claims satisfy the requirements of 35 U.S.C. § 112. It is also submitted that claims 1-27 continue to be allowable. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: /James J. Livingston, Jr./
James J. Livingston, Jr.
Registration No. 55,394

1201 New York Avenue, NW, 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501